Or is it simply that any young man engaged in the climb to consultant ranks simply cannot put a foot out of line for fear of being lost for ever overboard? If this is true, and I regret to say I think it is, then is it not high time that the medical profession, and specially the colleges, gave a positive lead in demanding, as is demanded in many other countries, that candidates for "the top" should spend some time working abroad. Failing this lead, very soon we will have no one at home with any experience of work abroad other than those in the specialist tropical and military institutions, and in this day and age of rapid travel worldwide medicine is brought to the doorstep of every doctor in ever larger quantities.—I am, etc.,

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P. M. JOHNSON.

Anticoagulants in Acute Myocardial Infarction

SIR,—Despite the excellent planning and the abundance of information the M.R.C. report (8 February, p. 335) does not resolve the problem of the value of current conventional oral anticoagulant treatment for acute myocardial infarction. This is because, as the authors suggest, the degree of anticoagulation was not an intense one—that is, 10 to 20% with Owren's thrombotest method. Many authors have shown that this means much lower anticoagulant dosage than when the Quick test is used and results interpreted from saline dilution curves.^{1,2} This is also supported by the dosage data in the report.

The thrombotest range equivalent to 15 to 30% prothrombin activity (1.8 to 3 ratio) with the Manchester (now designated British) comparative thromboplastin reagent is 5 to 10%. Professor Owren aims at 10% for the treatment of arterial thrombosis, with a range of 7 to 13%.³ Professor Loeliger aims at 4 to 8% in uncomplicated cases in short-term therapy.⁴ The Manchester (British) reagent is used in routine clinical practice in the majority of hospitals in four regional board areas in England covering a population of 17 million. It is also used as a reference preparation in most other parts of the country.

Among the useful data in the report is the percentage of results below 10% thrombotest. Only 22% of patients were below that level. Thus only this proportion of patients were receiving sufficient phenindione to be considered therapeutic. It is therefore only this small proportion of results which can be related to anticoagulant therapy as currently practised in the majority of hospitals in this country.

The authors of the report appear to be aware of this, but it would have been more helpful to the general reader if the findings had been strictly qualified by relating them to the coagulation defect, and stating that the relatively slight coagulation defect represented by 10 to 20% thrombotest confers no useful benefit in treatment of acute myocardial infarction.—I am, etc.,

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REFERENCES

- Lempert, H., and Poller, L., *Lancet*, 1960, 2, 1115.
- Sevitt, S., and Innes, D., *Lancet*, 1964, 1, 124.
- Owren, P. A., personal communication.
- Loeliger, E. A., personal communication.

Dermatoses in Lobster Fishermen

SIR,—In a previous note¹ it was suggested that a colonial diatom, *Fragilaria striatula* Lyngb., was strongly indicated as being the active agent causing eczema in a lobster fisherman. At that time the organism did not respond to the culture techniques used and positive evidence could not be obtained.

In the early summer of 1968 a thick coating of the diatoms again developed on lobster pot ropes at Aberdaron. The patient displayed symptoms similar to those previously described. The diatom flora on the ropes again included the *Navicula* species previously shown to be innocuous, but in the 1968 season the proportion of this organism in the population was much smaller and it proved possible to separate a quantity of uncontaminated *Fragilaria* from the mass. Culture was again attempted. Two culture solutions were used, both being of the enriched sea water type.

(1) Natural sea water, filtered before storage and again immediately prior to use through a millipore filter of 0.45 μ pore diameter, was enriched by the following additions: Sodium nitrate, 12 mg./l.; disodium hydrogen phosphate, 0.4 mg./l.; ethylene diamine tetra-acetic acid (as ferric salt), 100 μ g./l.; manganese chloride, 20 μ g./l.; vitamin B₁, 25 μ g./l.; vitamin B₁₂, 1 μ g./l.; biotin, 1 μ g./l. This solution is more fully described by Quraishi.²

(2) A more extensively enriched sea water containing additional trace elements as described by Walne³ and used by him for the culture of *Ischrysis*.

Cultures were set up in 250 ml. conical flasks and illuminated in constant temperature conditions (15° C.). Growth occurred on the bottom of all flasks inoculated, but more rapid growth was obtained when chains of cells were inserted into the fibres of a linen thread and suspended in the solution clear of the bottom.

When a pure sample of *Fragilaria striatula* was used in a patch test a strong positive reaction was obtained. No reaction was observed to patch tests using pure samples of the culture solutions. When the solution in which the cells were grown was filtered and the cell-free solution used in a patch test, there was no reaction. This indicates that the compound causing the reaction is present only in the cells or on their surfaces, and is not an extracellular product which they exude into the surrounding water. Extracts of the diatoms in various organic solvents were also tested; extracts in ethyl alcohol, acetone, and chloroform gave positive reactions, but that in diethyl ether did not.

It can therefore be concluded that the diatom *Fragilaria striatula* was the cause of the eczema observed in a lobster fisherman at Aberdaron. It is hoped that, by more detailed investigation, the active compound in the diatom cell may be identified chemically.—We are, etc.,

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REFERENCES

- Beer, W. E., Jones, M., and Jones, W. E., *Brit. med. J.*, 1968, 1, 807.
- Quraishi, F. O., Ph.D. Thesis, Univ. Wales, 1968.
- Walne, P. R., *Fish. Invest. Lond.*, ser. 2, 1966, 25, No. 4, 1.

Rh Immunization

SIR,—The report by Dr. W. Q. Ascari and his colleagues on the incidence of maternal Rh immunization (15 February, p. 399) warrants some comment. After recording the observed incidence of immunization resulting from ABO compatible pregnancies, they make an estimate of this incidence following ABO incompatible pregnancies. This estimate is derived from data recording the deficiency of ABO incompatible matings where maternal immunization has occurred. The conclusions drawn are incorrect because the overall effects of ABO incompatible matings are a compound of the affects of both ABO incompatible and ABO compatible pregnancies. For example, with the common mating O mother $\times$ A father at least 42% of the children are ABO compatible. The diminished liability of an individual ABO incompatible pregnancy to immunize is thus not clearly revealed by data which record the overall effect of ABO incompatible matings. Because of this, the estimates given by the above authors for the frequency of immunization by ABO incompatible pregnancies are too high.

In the Liverpool survey 303 Rh-negative primiparae have been tested six months after delivery of their first ABO incompatible pregnancy, and anti-D has been found in only three instances (expected, if pregnancies were ABO compatible, is 24). Eighty-six of these mothers have been followed through a second Rh-positive pregnancy and three have developed anti-D during this pregnancy (expected, if first pregnancy were ABO compatible, is eight). It is of interest that in all three mothers developing antibodies at this time the second pregnancy was ABO compatible.

It is generally agreed that even though the risk of ABO compatible pregnancies inducing immunization is considerably diminished compared with ABO in compatible pregnancies, anti-D gammaglobulin should be given, when supplies allow, to all Rh-negative mothers having Rh-positive babies. It is likely, however, that in some countries supplies will be limited for some years and the ABO relationships between baby and mother might be taken into account in deciding on priorities.

In relation to the use of anti-D during pregnancy one can add to the list of objections given by the authors the likelihood that it will not work. Safe doses of gammaglobulin will be dispersed among the mass of Rh-positive red cells within the foetal circulation, and a danger of an enhancing effect on the mother's immune response cannot be ruled out.—I am, etc.,

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Awareness during Anaesthesia

SIR,—We have had three instances where the patient could give an accurate description of the obstetric surgeon's conversation during an elective caesarean section (1 February, p. 280). We have overcome this problem by giving the patient 10 mg. of droperidol, 30 minutes prior to operation. This management has proved entirely satisfactory. There has been no delay in the onset of neonatal

respiration. The patient is always allowed to recover consciousness before leaving the operating theatre. There is some reduction in the amount of postoperative pain.—We are, etc.,

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SIR,—Dr. J. Wilson and Dr. D. J. Turner (1 February, p. 280) aim to produce a patient who “regards the past experience with no displeasure and the future anaesthetic with no apprehension.” This prompts me to make a plea for greater recognition of the value of epidural nerve block for this operation. Many anaesthetists assume that having a caesarean section while awake will be a considerable ordeal for the patient. This, Sir, is far from being invariably true.

My own experience is that mostly women find the idea quite acceptable provided the idea is correctly presented to them, and I have yet to find the patient who has afterwards pleaded that the technique be abandoned for future occasions.

As so frequently happens, the more it is done the better are the results. The pre-requisite demands of the technique are but few. It is mandatory that the anaesthetist should personally visit the patient beforehand to explain the routine to her and to make it quite clear to her that, while she will be vaguely aware of touch and of pressure, she will *not* feel pain. At the time of the giving of the epidural, the labile nature of the blood pressure control should be remembered. In elective caesareans I consider it advisable to give a vasopressor intramuscularly before injection of the local solution is started. The routine injection of ergometrine is not necessary, since with a sympathetic blockade the emptied uterus will contract down well in most cases. The advantages are outstanding and include excellent operating conditions, greater safety for the infant, complete avoidance of the “anoxic episode” consequent upon a difficult intubation, and recall which is positively pleasant. The postoperative period is marked by total absence of vomiting, nausea, or sore throat, and the temporary rejection of the infant which can occasionally be seen following general anaesthesia never occurs. Finally, if intermittent injections of bupivacaine are given via an indwelling epidural catheter postoperatively this supercedes the need for opiates.

While not claiming that all cases are suitable for this method, nevertheless I am sure that the proportion of women who would find the idea wholly acceptable is much higher than is reflected by current practice.—I am, etc.,

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Consent for Sterilization

SIR,—I have recently been in correspondence with the Medical Defence Union over a matter which is of great importance to those of us who work in the contraceptive or gynaecological fields. I have the Union's consent to quoting the following extract from its last letter.

“I confirm our advice that where the patient requires contraceptive measures to be taken in order to preserve her from death or from injury to physical or mental health, then the doctor is entitled to employ any means at his disposal, including a sterilizing operation if that is the clinically appropriate step, without the consent of the husband, although he should be consulted if the wife will permit it. The husband is not legally able to veto sterilization, the insertion of an I.U.C.D., or any other step necessary to preserve the wife's health from injury. Only where birth control is decided upon for reasons of convenience, not being necessary to preserve the woman's health from harm, might the husband have a right of action in damages against the doctor who sterilized his wife or inserted an I.U.C.D., without seeking his prior consent or with knowledge of his opposition.”

This unequivocal statement enables us to put our patients' health first without the fear that by so doing we might be contravening the law.—I am, etc.,

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Importation of Disease

SIR,—In the face of the switch of the international traveller from sea to air and the enormous increase in global movement the breakdown of the international regulations is a serious factor in the health of any community in which an imported disease may spread.

There is, however, another aspect of the problem which is becoming highly significant. This is the harm that may come to the person who has acquired an infection, as distinct from the effect the latter may have in the community.¹⁻³ Unfortunately, just as the original case of smallpox is often missed until the secondary cases appear, so diseases such as malignant malaria may be missed largely because they are unexpected. The idea of surveillance should therefore be extended to the infected individual.

It is to be hoped that the new look at the International Sanitary Regulations (28 December, p. 789) may provide the opportunity of devising an international warning system which will not only alert the public health authorities but also the potential individual victim who has been travelling in a world in which the longest air journey can be accomplished in a fraction of the incubation period of any of the major communicable diseases.⁴ At present the arriving passenger is given a card issued by the Ministry of Health for the Council of Europe, advising him to report to a doctor if he falls ill within 21 days and informing the doctor that he may have acquired an acute infectious disease abroad. This card is, of course, primarily designed to help the public health authorities protect the community against the spread of infectious disease. I think it needs rewriting in many respects, specially in regard to the potential risk to the individual, who may have acquired on his travels a disease such as falciparum malaria which could be fatal to him but is of no public health consequence.

The situation is not helped by the multitude of words being poured out at the

moment in press, radio, and television urging people to escape into the sun during the miserable winter months. In these advertisements I have noted only once any reference to the risk of acquiring disease abroad, and this was a comment that the holiday might be ruined by diarrhoea, which could be prevented by taking a recommended prophylactic. I have never seen anything in the public press about the personal or communal risks of importing disease into this country on return from holiday overseas. No doubt such warnings are bad for trade, but their relative absence even in professional literature confirms my impression that public and doctors alike remain largely unaware of the medical implications of travel abroad.

Judging from the recent medical histories of some of the patients we have seen here I would say that the profession and the public as a whole are ignorant of or uninterested in the growing challenge of disease imported by travellers and immigrants. Maybe when the jumbo jets begin pouring their loads into our already overcrowded airports someone will take some action.—I am, etc.,

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REFERENCES

- Deschiens, R., et al., *Bulletin de la Société de Pathologie Exotique*, 1964, 57, 643.
- Symposium on the Early Detection of Imported and Endemic Disease, *J. roy. Coll. gen. Practit.*, 1968, 16, Suppl., No. 2.
- Communicable Diseases Contracted Outside Britain*, Ministry of Health, May 1968, Ministry of Health, London.
- Maegraith, B., *Lancet*, 1963, 1, 401.

Indications for Tonsillectomy

SIR,—May I join issue with Mr. C. A. Holborow in his advocacy of removal of adenoids while leaving the tonsils (8 February, p. 379)? I do not dispute that enlarged adenoids cause the symptoms that he described, but I do not think that this is necessarily an indication for their removal. Conservative treatment will often shrink the adenoids and restore the nasopharyngeal airway. The nasal ciliary action will bathe the adenoids in any solution sprayed into the nose. I use a spray of ephedrine hydrochloride 0.9% and silver vitellin 1% in saline (Argotone) each night for about six weeks and for two or three weeks after colds.

In the survey of over 1,000 Cornish school-leavers who had had their tonsils removed quoted in your leading article (25 January, p. 203) an attempt was made to demonstrate the changing preoperative symptoms when the adenoids regress as the child grows. There were 165 children operated upon aged 3 to 5 years. Of these 63% were having recurrent attacks of tonsillitis, and in addition symptoms due to large adenoids were much in evidence: snoring 56%, nasopharyngeal obstruction 40%, ear infection and deafness 28%, frequent colds 26%, and speech defects 16%. At operation only 11% had insufficient adenoid tissue to warrant removal, while 52% had adenoids causing gross obstruction.

One hundred and eighty-nine children were over 10 years old when their tonsils were removed. Recurrent tonsillitis had occurred in 82%. Symptoms related to the